

IN THE SPECIFICATION

Please amend the paragraph starting on page 16, line 24 as follows:

The ionic species implanted into the material layer 108, prior to etching this layer, may be selected on the basis of process requirements in manufacturing the devices on the substrate 107 and on the basis of the magnitude of influence the ionic species exerts on the specified material layer 108 upon etching this layer with the tool 100 and the specified etch recipe. For instance, if it is required that a change of electrical properties of the material layer 108 after etching the same is substantially not acceptable, a substantially inert ion species, such as ions of noble gases, may be selected. In other cases, ions of the same type as initially contained in the material layer 108 may be implanted, so that electrical characteristics thereof are substantially maintained after implantation. In yet another case, the ion species is selected so as to have a diffusivity that is less than a predefined threshold at temperatures of subsequent manufacturing processes. Once an acceptable ion species is selected, an appropriate energy for positioning the ions within the layer 108 may be obtained by simulation calculations and/or by experiment. In one embodiment, an energy of the ion species that is to be non-uniformly implanted into the material layer 108 is controlled such that the ion species is substantially confined within the layer 108 substantially without penetrating any areas lying underneath the layer 108.